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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,761	04/13/2004	Zhiqing Zhang	4533-0108PUS1	4958
2292 7590 03/21/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER MCGARRY, SEAN	
			ART UNIT	PAPER NUMBER
			1635	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE		DELIVERY MODE
3 MONTHS		03/21/2007		ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/21/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary**

Application No.

10/822,761

Applicant(s)

ZHANG ET AL.

Examiner

Sean R. McGarry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 4, 7, 8 and 14 is/are rejected.
- 7) ☒ Claim(s) 1, 3, 5, 6, 10, 12, and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant arguments in regard to the restriction requirement of record are not considered. The restriction requirement was made final in the previous Official Action and continued arguments will not be entertained at this point in prosecution. Applicant does have the option to petition the restriction requirement.

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. Applicants' amendments have either overcome or have not specifically addressed the grounds of rejection below. Any grounds of rejection made in the previous Official Action and not repeated below are withdrawn.

Claims 1-14 are pending. Claims 2 and 9, and sequences other than SEQ ID NO: 25 have been withdrawn from prosecution.

Claims 3, 4-8, 10, and 12-14 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 3 and 12 require that the claimed sequence have a specified secondary structure. Claim 1

is limited to a specific sequence and it would be presumed that the sequence has that secondary structure [of claim 3] or is a latent property of that sequence. Similarly in claim 12, since it has been disclosed in the specification that the secondary structure is what is recognized by the targeted TNF, it would be assumed that at least the sequence SEQ ID NO: 25 comprised in the oligonucleotide [of claim 11] would have this structure [of claim 12].

Claim 1 is limited to a specific sequence [SEQ ID NO: 12]. The inclusion of species that have 70% homology [as in claim 4] broadens the scope of the invention. Claim 14 suffers from issues as above and further since it must act "identical" it would appear to have to be identical since any change in chemical makeup will result in different chemical properties albeit they may be very small differences.

Claim 5 fails to limit the invention of claim 1 since SEQ ID NO: 25 is defined in the specification as being a truncated oligonucleotide and, of course would function identical to itself. Furthermore since the invention is limited to a specified sequence it inherently contains that sequence required in the subsequent claim. Claims 10 and 13 suffer from issues similar to the above.

Claim 6 fails to further limit the scope of claim 1 since it broadens the scope by including "modified sequence" which would include, for example, "different sequences".

Claim 7 fails to further limit the invention of claim 1 since it is drawn to other than the sequence to which claim 1 is limited. It includes, for example, a sequence that hybridizes to SEQ ID NO: 25.

Claim 8 broadens the scope of claim 1 to include derived sequences of SEQ ID NO: 25. Claim 1 is limited to SEQ ID NO: 25, for example.

Claims 1, 3, 10 are objected to because of the following informalities: these claims recite inventions that have been withdrawn from consideration. Appropriate correction is required.

This application contains claims and claims reciting subject matter drawn to an invention nonelected with traverse in Papers filed 1/10/06 and 4/13/06. A complete reply to the final rejection must include cancellation of nonelected claims or nonelected subject matter or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 8 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 and 14 require that the invention have 70% homology and function identically to that compound to which it has homology. It is unclear how a chemical compound could have different chemical constituents and still act identical to the compound it is compared to. Just by the virtue of having a different chemical

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composition seems to define that the compounds are different and cannot therefore function identically. Correction or explanation appears to be in order.

Claim 8 refers to a sequence "derived". It is unclear without a specific definition of the term what applicant intends with this term such that one in the art would know the metes and bounds of the claims. It is noted, for example, that the invention of claim 8 does not appear to have to have the function of the oligonucleotide of claim 1.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 7 rejected under 35 U.S.C. 102(e) as being anticipated by Matsuzaki et al [US20040146890A1].

Matsuzaki et al disclose a 25mer [SEQ ID NO: 117,143] that could hybridize to the instant SEQ ID NO: 25. An attachment showing alignment is provided for applicants' convenience.

Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Pavco et al [US 6,346,398].

Pavco et al disclose a hammerhead ribozyme sequence [SEQ ID NO: 1,170] that could have been chemically made from the instant SEQ ID NO: 25 via a succession of nucleotide additions and substitutions. This rejection is made since the specification as filed provides no definition of the term derived and the above would be representative of a chemical derivation the SEQ ID NO: 25. An attachment showing alignment is provided for applicants' convenience.

Claim 11 is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

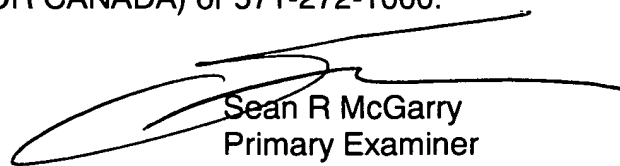
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean R. McGarry whose telephone number is (571) 272-0761. The examiner can normally be reached on M-Th (6:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Douglas Schultz can be reached on (571) 272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sean R McGarry  
Primary Examiner  
Art Unit 1635